## IN THE CLAIMS

This listing of claims replaces all prior listings.

1. (currently amended) A computer-implemented method in a data processing system having a program in a memory, the method performed by the program comprising the steps of:

asynchronously receiving a first datatype at a subscriber;

determining whether the subscriber subscribes to at least one additional datatype after receiving the first datatype; and

querying for the at least one additional datatype responsive to a determination that the subscriber subscribes to the at least one additional datatype,

wherein the first datatype includes a reference to a data instance, the data instance being maintained separately from the first datatype, the first datatype including a metadata including a key that enables the first datatype to be joined with other datatypes having the key in their respective metadata, and

wherein determining whether the subscriber subscribes to additional datatypes comprises identifying the key in the first datatype. 62-68

- 2. (original) The method of claim 1 further comprising the step of: asynchronously receiving at least one of the additional datatypes.
- 3. (canceled).
- 4. (original) The method of claim 1, wherein a storage controller is queried for the additional datatypes.
  - 5. (original) The method of claim 1, further comprising the step of: subscribing to the first datatype and at least one of the additional datatypes.

6. (currently amended) A tangible computer-readable medium containing instructions that cause a program in a data processing medium to perform a method comprising the steps of:

asynchronously receiving a first datatype at a subscriber;

determining whether the subscriber subscribes to at least one additional datatype after receiving the first datatype; and

querying for the at least one additional datatype responsive to a determination that the subscriber subscribes to the at least one additional datatype,

wherein the first datatype includes a reference to a data instance, the data instance being maintained separately from the first datatype, the first datatype including a metadata including a key that enables the first datatype to be joined with other datatypes having the key in their respective metadata, and

wherein determining whether the subscriber subscribes to additional datatypes comprises identifying the key in the first datatype.

- 7. (original) The computer-readable medium of claim 6, further comprising the step of: asynchronously receiving at least one of the additional datatypes.
- 8. (canceled).
- 9. (original) The computer-readable medium of claim 6, wherein a storage controller is queried for the additional datatypes.
  - 10. (original) The computer-readable medium of claim 6, further comprising the step of: subscribing to the first datatype and at least one of the additional datatypes.
  - 11. (currently amended) A data processing system comprising:

a memory having a program that asynchronously receives a first datatype at a subscriber, determines whether the subscriber subscribes to at least one additional datatype after receiving the first datatype, and queries for the at least one additional datatype responsive to a determination that the subscriber subscribes to the at least one additional datatype.

wherein the first datatype includes a reference to a data instance, the data instance being maintained separately from the first datatype, the first datatype including a metadata including a key that enables the first datatype to be joined with other datatypes having the key in their respective metadata, and

wherein the determination of whether the subscriber subscribes to additional datatypes comprises identifying the key in the first datatype; and

a processing unit that runs the program.

12. (currently amended) A data processing system comprising:

means for asynchronously receiving a first datatype at a subscriber;

means for determining whether the subscriber subscribes to at least one additional datatype after receiving the first datatype; and

means for querying for the at least one additional datatype responsive to a determination that the subscriber subscribes to the at least one additional datatype.

wherein the first datatype includes a reference to a data instance, the data instance being maintained separately from the first datatype, the first datatype including a metadata including a key that enables the first datatype to be joined with other datatypes having the key in their respective metadata, and

wherein determining whether the subscriber subscribes to additional datatypes comprises identifying the key in the first datatype.